



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,381	10/05/2001	Jenifer Fahey	CS90041	5141
20280	7590	12/23/2005	EXAMINER	
MOTOROLA INC 600 NORTH US HIGHWAY 45 ROOM AS437 LIBERTYVILLE, IL 60048-5343			FLANDERS, ANDREW C	
			ART UNIT	PAPER NUMBER
			2644	
DATE MAILED: 12/23/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/972,381	FAHEY ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Andrew C. Flanders	2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 15 November 2001.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-37 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 05 October 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7, 8, 13, 14 and 15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "common" in the claims is a relative term which renders the claim indefinite.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1 – 37 are rejected under 35 U.S.C. 102(e) as being anticipated by**

Hruska (U.S. Patent Application Publication 2002/0170415).

Regarding Claim 1, Hruska discloses:

A method for creating a polyphonic audio mix on a handheld mobile wireless communication device having soundtrack data set file stored thereon (abstract), comprising:

entering first reference data for a first soundtrack of the soundtrack data set file into an audio mix data reference file by selecting the first soundtrack (i.e. a configuration of musical parts, patterns and MIDI channel assignments (*soundtrack data set file*); Fig. 1, a configuration and control grid data file, the file including data on when and how to playback the information from the pieces disclosed in Fig. 1 (*audio mix data reference file*); Fig. 2, the user creates the control file; paragraph 38; the control file containing data such as solo pattern assignment; (*entering first reference data*); Fig. 2))

entering second reference data for a second soundtrack of the soundtrack data set file into the audio mix data reference file by selecting the second soundtrack (the process above is done again for other instruments, such as drums, and bass; Fig. 2);

the audio mix data reference file having the first and second reference data representative of a user defined polyphonic audio mix (i.e. the control file is user created; paragraph 38 and Fig. 3)

storing the audio mix data reference file having the first and second reference data on the handheld mobile wireless communication device separately from the soundtrack data set file (i.e. the MIDI sequence and control files are loaded into memory and then can be downloaded to the mobile device; paragraphs 38 – 40).

Furthermore in addition to the elements stated above, Hruska discloses the following, which is considered to be applicable to the claimed invention:

Users are allowed to rearrange which parts and which part patterns are playing at any given time, what MIDI instruments are assigned to the given parts and patterns, the tempo of the song, the volume of the parts and patterns, the notes of the parts and patterns and a variety of other MIDI effects such as note duration or hold, grace notes, pitch bend, chord creation, chord inversion, and accents; paragraph 20; and also see further paragraph 88.; and also see further paragraph 88.

Regarding **Claims 2, 11 and 17**, in addition to the elements stated above regarding claims 1, 10 and 16, Hruska further discloses:

entering first time data associated with the first reference data into the audio mix data reference file, entering second time data associated with the second reference data into the audio mix data reference file (i.e. the data as to when the parts are to be played and muted, the solo, harmony... etc in given in the values column in the form of A, a, B, b and -, thus indicating a time when they data is to be reproduced; Fig. 2).

Regarding **Claims 3 and 12**, in addition to the elements stated above regarding claims 1 and 10, Hruska further discloses:

entering tempo data associated with the user defined polyphonic audio mix into the audio mix data reference file (i.e. in the last line of Fig. 2, there is song tempo data in BPM).

Regarding **Claim 4**, in addition to the elements stated above regarding claim 1, Hruska further discloses:

entering reference soundtrack data into the audio mix data reference file (i.e. the user creates the control file; paragraph 38; the control file containing data such as solo pattern assignment which originates from the data in Fig. 1; see Fig. 2).

Regarding **Claim 5**, in addition to the elements stated above regarding claim 1, Hruska further discloses:

entering the first reference data by selecting the first soundtrack (i.e. entering the solo pattern assignment; Fig. 2);

entering second reference data by selecting the second soundtrack while the first soundtrack is playing (i.e. entering the drum assignment; Fig. 2 and the control parameters can be rearranged or changed during operation; paragraph 24);

playing the second soundtrack with the first soundtrack after selecting the second soundtrack (i.e. if the drum assignment is defined with a value that indicates it is to be played at the current time it is implicit that this will occur; Fig. 2).

Regarding **Claim 6**, in addition to the elements stated above regarding claim 1, Hruska further discloses:

entering the first reference data by selecting the first soundtrack (i.e. entering the solo pattern assignment; Fig. 2);

entering first effect reference data for a first soundtrack effect of the soundtrack data set file by selecting the first soundtrack effect while the first soundtrack is playing, playing the first soundtrack effect with the first soundtrack upon selecting the first soundtrack effect (i.e. users are allowed to rearrange which parts and which part patterns are playing at any given time, what MIDI instruments are assigned to the given parts and patterns, the tempo of the song, the volume of the parts and patterns, the notes of the parts and patterns and a variety of other MIDI effects such as note duration or hold, grace notes, pitch bend, chord creation, chord inversion, and accents; paragraph 20; and also see further paragraph 88. and also see further paragraph 88).

Regarding **Claim 7**, in addition to the elements stated above regarding claim 1, Hruska further discloses:

integrating the audio mix data reference file and the soundtrack data set file into a common audio format file (i.e. the MIDI file, control data file or any combination thereof is downloaded to the mobile device; paragraph 40).

Regarding **Claims 8, 13 and 14**, in addition to the elements stated above regarding claims 1, 10 and 14, Hruska further discloses:

irreversibly integrating the audio mix data reference file and the soundtrack data set file into a common audio format file (i.e. the MIDI sequence data and control file may be combined and rendered into a standard MIDI file; paragraph 38).

Regarding **Claims 9 and 20**, in addition to the elements stated above regarding claims 1 and 19, Hruska further discloses:

playing the user defined polyphonic audio mix on the handheld mobile wireless communication device by playing the first and second soundtracks of the soundtrack data set file referenced by the first and second reference data in the audio mix data reference file (i.e. once the music content data is on the mobile device the end user can initiate playback; paragraph 43).

Regarding **Claim 10**, Hruska discloses:

A method for playing a polyphonic audio mix on a handheld mobile wireless communication device having a soundtrack data set file stored therein (abstract) comprising:

playing a first soundtrack of the soundtrack data set file referenced in an audio mix data reference file (in addition to the elements stated above regarding claim 1, Hruska further discloses once the music content data is on the mobile device the end user can initiate playback; paragraph 43),

playing a second soundtrack of the soundtrack data set file referenced in an audio mix data reference file (in addition to the elements stated above regarding claim 1, Hruska further discloses once the music content data is on the mobile device the end user can initiate playback; paragraph 43),

the audio mix data reference file devoid of soundtrack data of the soundtrack data set file (the control file in Fig. 2 does not include the musical elements of the file in Fig. 1),

the audio mix data reference file stored separately from the soundtrack data set file on the handheld mobile wireless communication device (i.e. the MIDI file, control data file or any combination thereof is downloaded to the mobile device; paragraph 40).

Furthermore in addition to the elements stated above, Hruska discloses the following, which is considered to be applicable to the claimed invention:

Users are allowed to rearrange which parts and which part patterns are playing at any given time, what MIDI instruments are assigned to the given parts and patterns, the tempo of the song, the volume of the parts and patterns, the notes of the parts and patterns and a variety of other MIDI effects such as note duration or hold, grace notes, pitch bend, chord creation, chord inversion, and accents; paragraph 20; and also see further paragraph 88.; and also see further paragraph 88.

Regarding **Claim 14**, in addition to the elements stated above regarding claim 14, Hruska further discloses:

uploading the common audio format file from the handheld mobile wireless communication device (i.e. it also allows for rendering a song to a standard MIDI file and sending it to a friend with a text message; paragraph 88).

Regarding **Claim 16**, in addition to the elements stated above regarding claim 16, Hruska further discloses:

before integrating, creating the audio mix by entering first reference data for the first soundtrack into the audio mix data reference file and by entering second reference data from the second soundtrack into the audio mix data reference file (i.e. Fig. 2 is created before it is stored and played back; the data files will reside on a computer-readable medium of one form or another; paragraphs 40 and 41).

Regarding **Claim 18**, Hruska discloses:

A method for a polyphonic audio mix on a handheld mobile wireless communication device (abstract), comprising:

selecting a first soundtrack (i.e. entering the solo pattern assignment; Fig. 2),  
playing the first soundtrack upon entering the first soundtrack;  
selecting a second soundtrack while playing the first soundtrack;  
playing the second soundtrack upon selecting the second soundtrack while  
playing the first (i.e. users are allowed to rearrange which parts and which part patterns  
are playing at any given time, what MIDI instruments are assigned to the given parts  
and patterns, the tempo of the song, the volume of the parts and patterns, the notes of  
the parts and patterns and a variety of other MIDI effects such as note duration or hold,  
grace notes, pitch bend, chord creation, chord inversion, and accents; paragraph 20;  
and also see further paragraph 88.).

Regarding **Claim 19**, in addition to the elements stated above regarding claim 18, Hruska further discloses:

A soundtrack data set file including the first and second soundtracks stored on the handheld mobile wireless communication device (i.e. the MIDI file, control file or any combination is downloaded to the mobile device; paragraph 40),

entering first reference data for the first soundtrack of the soundtrack data set file into an audio mix data reference file upon selecting the first soundtrack (i.e. a configuration of musical parts, patterns and MIDI channel assignments (*soundtrack data set file*); Fig. 1, a configuration and control grid data file, the file including data on when and how to playback the information from the pieces disclosed in Fig. 1 (*audio mix data reference file*); Fig. 2, the user creates the control file; paragraph 38; the control file containing data such as solo pattern assignment; (*entering first reference data*); Fig. 2))

entering second reference data for the second soundtrack of the soundtrack data set file into the audio mix data reference file upon selecting the second soundtrack (the process above is done again for other instruments, such as drums, and bass; Fig. 2);

the audio mix data reference file having the first and second reference data representative of a user defined polyphonic audio mix (i.e. the control file is user created; paragraph 38 and Fig. 3),

the audio mix data reference file representative of a user defined polyphonic audio mix (i.e. the control file is user created; paragraph 38 and Fig. 3);

storing the audio mix data reference file on the handheld mobile wireless communication device (i.e. the MIDI file, control file or any combination is downloaded to the mobile device; paragraph 40).

Regarding **Claim 21**, in addition to the elements stated above regarding claim 18, Hruska further discloses:

Selecting the first soundtrack from a first plurality of soundtracks perceptible by a user of the handheld mobile wireless communication device, selecting the second soundtrack form a second plurality of soundtracks perceptible by a user of the handheld mobile wireless device (paragraph 88).

Regarding **Claim 22**, in addition to the elements stated above regarding claim 18, Hruska further discloses:

at least one of the soundtracks is a reference soundtrack, selecting the reference soundtrack before selecting a subsequent soundtrack (the drum part still references a single MIDI instrument; paragraph 23; depending on when the users would input the drum selection, if it were first, which could be within the scope of Hruska's invention, the reference soundtrack would be selected before a subsequent soundtrack).

Regarding **Claim 23**, in addition to the elements stated above regarding claim 22, Hruska further discloses:

selecting at least one subsequent soundtrack while the reference soundtrack is playing, mixing the at least one subsequent soundtrack selected with the reference soundtrack upon selecting the subsequent soundtrack (i.e. users are allowed to rearrange which parts and which part patterns are playing at any given time, what MIDI instruments are assigned to the given parts and patterns, the tempo of the song, the volume of the parts and patterns, the notes of the parts and patterns and a variety of other MIDI effects such as note duration or hold, grace notes, pitch bend, chord creation, chord inversion, and accents; paragraph 20; and also see further paragraph 88.).

Regarding **Claim 24**, in addition to the elements stated above regarding claim 18, Hruska further discloses:

selecting the first soundtrack from a plurality of reference soundtracks each having corresponding rhythmic and harmonic characteristics (i.e. the soundtracks are selected from the solo, harmony, drum, and bass pattern in Fig. 1).

Regarding **Claim 25**, in addition to the elements stated above regarding claim 24, Hruska further discloses:

selecting the second soundtrack from a plurality of soundtracks having a corresponding melody (i.e. the soundtracks are selected from the solo, harmony, drum, and bass pattern in Fig. 1).

Regarding **Claim 26**, in addition to the elements stated above regarding claim 18, Hruska further discloses:

stopping the playing of the first soundtrack while the first and second soundtracks are playing (i.e. users are allowed to rearrange which parts and which part patterns are playing at any given time, what MIDI instruments are assigned to the given parts and patterns, the tempo of the song, the volume of the parts and patterns, the notes of the parts and patterns and a variety of other MIDI effects such as note duration or hold, grace notes, pitch bend, chord creation, chord inversion, and accents; paragraph 20; and also see further paragraph 88.).

Regarding **Claim 27**, in addition to the elements stated above regarding claim 18, Hruska further discloses:

selecting an audio characteristic for at least one of the selected soundtrack while playing the soundtrack for which the audio characteristic is selected, changing the audio characteristic of the selected soundtrack while the soundtrack is playing upon selecting the audio characteristic (i.e. users are allowed to rearrange which parts and which part patterns are playing at any given time, what MIDI instruments are assigned to the given parts and patterns, the tempo of the song, the volume of the parts and patterns, the notes of the parts and patterns and a variety of other MIDI effects such as note duration or hold, grace notes, pitch bend, chord creation, chord inversion, and accents; paragraph 20; and also see further paragraph 88.).

Regarding **Claim 28**, in addition to the elements stated above regarding claim 18, Hruska further discloses:

selecting a global audio characteristic common to all selected soundtrack while playing the selected soundtrack or which the global audio characteristic is selected, changing the audio characteristic of all selected soundtracks while the soundtracks are playing upon selecting the global audio characteristic (i.e. users are allowed to rearrange which parts and which part patterns are playing at any given time, what MIDI instruments are assigned to the given parts and patterns, the tempo of the song, the volume of the parts and patterns, the notes of the parts and patterns and a variety of other MIDI effects such as note duration or hold, grace notes, pitch bend, chord creation, chord inversion, and accents; paragraph 20; and also see further paragraph 88.).

Regarding **Claim 29**, in addition to the elements stated above regarding claim 18, Hruska further discloses:

selecting the first soundtrack to play for a first time interval, selecting the second soundtrack to play for a second time interval different than the first time interval (users are allowed to rearrange which parts and which part patterns are playing at any given time; paragraph 20; and also see further paragraph 88.; and see Fig. 2).

Regarding **Claim 30**, Hruska discloses:

A method for creating a polyphonic audio mix on a handheld mobile wireless communication device (abstract), comprising:

playing a first soundtrack upon selecting the first soundtrack;  
selecting an audio characteristic for the selected first soundtrack while playing the first soundtrack;  
playing the selected audio characteristic of the first soundtrack while playing the first soundtrack upon selecting the audio characteristic (i.e. users are allowed to rearrange which parts and which part patterns are playing at any given time, what MIDI instruments are assigned to the given parts and patterns, the tempo of the song, the volume of the parts and patterns, the notes of the parts and patterns and a variety of other MIDI effects such as note duration or hold, grace notes, pitch bend, chord creation, chord inversion, and accents; paragraph 20; and also see further paragraph 88.)

Regarding **Claim 31**, in addition to the elements stated above regarding claim 30, Hruska further discloses:

the first soundtrack is a reference soundtrack, selecting the first soundtrack from a plurality of different reference soundtracks (i.e. the drum part still references a single MIDI instrument; paragraph 23), selecting a second soundtrack from a plurality of non-reference soundtracks while the reference soundtrack is playing, playing the second soundtrack upon selecting the second soundtrack while the reference soundtrack is playing (i.e. if the drum soundtrack is considered to be the reference (i.e. main), the

following will be selections non reference; Fig. 2, also users are allowed to rearrange which parts and which part patterns are playing at any given time, what MIDI instruments are assigned to the given parts and patterns, the tempo of the song, the volume of the parts and patterns, the notes of the parts and patterns and a variety of other MIDI effects such as note duration or hold, grace notes, pitch bend, chord creation, chord inversion, and accents; paragraph 20; and also see further paragraph 88.)

Regarding **Claim 32**, in addition to the elements stated above regarding claim 31, Hruska further discloses:

selecting the second soundtrack from a plurality of musical instrument soundtracks (Fig. 1).

Regarding **Claim 33**, in addition to the elements stated above regarding claim 30 Hruska further discloses:

stopping the playing of the first soundtrack, stopping the playing of the audio characteristic for the first soundtrack upon stopping the playing of the first soundtrack (i.e. users are allowed to rearrange which parts and which part patterns are playing at any given time, what MIDI instruments are assigned to the given parts and patterns, the tempo of the song, the volume of the parts and patterns, the notes of the parts and patterns and a variety of other MIDI effects such as note duration or hold, grace notes,

pitch bend, chord creation, chord inversion, and accents; paragraph 20; and also see further paragraph 88.)

Regarding **Claim 34**, Hruska discloses:

A method for creating a polyphonic audio mix on a handheld mobile wireless communication device (abstract), comprising:

selecting a first soundtrack having a first time interval;

selecting a second soundtrack having a second time interval, the second time interval different than the first time interval (i.e. the selected tracks in Fig 2 are to be played at intervals depending on what the user wants depending on their set values; also see paragraph 24);

mixing the first and second soundtracks (i.e. the data parts are played back together and thus mixed and the output is depending on the control data in Fig. 2).

Regarding **Claim 35**, in addition to the elements stated above regarding claim 34, Hruska further discloses:

if the time interval of the first and second soundtracks overlaps, selecting the second soundtrack while the first soundtrack is playing and playing the second soundtrack with the first soundtrack upon selection of the second soundtrack (i.e. users are allowed to rearrange which parts and which part patterns are playing at any given time, what MIDI instruments are assigned to the given parts and patterns, the tempo of the song, the volume of the parts and patterns, the notes of the parts and patterns and a

variety of other MIDI effects such as note duration or hold, grace notes, pitch bend, chord creation, chord inversion, and accents; paragraph 20; and also see further paragraph 88.)

Regarding **Claim 36**, in addition to the elements stated above regarding claim 34, Hruska further discloses:

saving an audio mix reference file corresponding to a polyphonic audio mix (i.e. the MIDI file, control file or any combination is downloaded to the mobile device; paragraph 40),

the audio mix reference file referencing the first and second soundtracks stored in a separate file (i.e. in Fig. 2, the control file references the various tracks which are stored in Fig. 1),

playing the polyphonic audio mix by referencing the first and second soundtracks with the audio mix reference file (i.e. once the music content data is on the mobile device the end user can initiate playback; paragraph 43).

Regarding **Claim 37**, Hruska discloses:

A method for creating a polyphonic audio mix on a handheld mobile wireless communication device (abstract), comprising:

playing a first soundtrack by selecting the soundtrack;

selecting one of a second soundtrack and an audio characteristic of the first soundtrack while playing first soundtrack;

if the second soundtrack is selected, playing the second soundtrack with the first sound upon selecting the second soundtrack without further input by user,

if the audio characteristic is selected, playing the audio characteristic of the first soundtrack upon selecting the audio characteristic while playing the first soundtrack without further input by user (i.e. users are allowed to rearrange which parts and which part patterns are playing at any given time, what MIDI instruments are assigned to the given parts and patterns, the tempo of the song, the volume of the parts and patterns, the notes of the parts and patterns and a variety of other MIDI effects such as note duration or hold, grace notes, pitch bend, chord creation, chord inversion, and accents; paragraph 20; and also see further paragraph 88.)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Flanders whose telephone number is (571) 272-7516. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

acf



HUYEN LE  
PRIMARY EXAMINER